

The RTR tetramer and both monomeric peptides (RTR and RTRGG) also inhibited polymorphonuclear leukocytes activated by the ultrafiltered tripeptide chemoattractants; albeit at much higher concentrations (TABLE 2). None of the peptides were antagonistic to LTB₄ activation of polymorphonuclear leukocytes (TABLE 3). None of the complementary peptides stimulated resting polymorphonuclear leukocytes (TABLE 4).

TABLE 2

Complementary Peptide Inhibition of PMN Polarization Activated by
Alkali-Degraded Rabbit Corneal Ultrafiltrate

5

Complementary Peptides	Antagonist Activity (ID ₅₀)	p-value
RTR tetramer	30 μ M \pm 7 μ M	<0.001
RTR	7.4 mM \pm 1.6 mM	<0.001
RTRGG	9.0 mM \pm 2.5 mM	<0.001

* Untreated polymorphonuclear leukocytes (negative control)

produced a polarization response of 6.6% \pm 1.4% (n = 10). PMNs

activated with the ultrafiltered tripeptide chemoattractants (25.0 mg

original corneal dry weight degraded per ml of alkali) produced a

10 positive control polarization response of 57.6% \pm 4.4% (n = 10). This

chemoattractant concentration was selected from the linear portion

of the dose response curve, yielding approximately 50% polarization

after subtraction of the negative control values. Antagonistic activity

(ID₅₀, mean \pm standard deviation) was interpolated from five dose

15 response curves for each complementary peptide.

TABLE 3

Complementary Peptide Inhibition of LTB₄ Activated PMN

5 Polarization

Complementary Peptides	Antagonist Activity
RTR tetramer	None, ≤ 20 mM
RTR	None, ≤ 10 mM
RTRGG	None, ≤ 10 mM

* Untreated polymorphonuclear leukocytes (negative control)

produced a polarization response of $5.3\% \pm 2.1\%$ ($n = 6$). PMNs

activated with 2×10^{-9} M LTB₄ (positive control) produced a

10 polarization response of $53.4\% \pm 11.3\%$ ($n = 6$). This chemoattractant

concentration was selected from the linear portion of the dose

response curve, yielding approximately 50% polarization after

subtraction of the negative control values. Antagonistic activity

(ID₅₀, mean \pm standard deviation) was determined from five dose

15 response curves for each complementary peptide.